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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,831	11/30/2006	Maria Kavallaris	69544-2	2175

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EXAMINER	
HADDAD, MAHER M	
ART UNIT	**PAPER NUMBER**
1644	

MAIL DATE	DELIVERY MODE
11/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,831	KAVALLARIS, MARIA	
	Examiner	Art Unit	
	Maher M. Haddad	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 9-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 9-15 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.Applicant's amendment, filed on 9/16/05, is acknowledged.

Claims 9-15 *are pending and being acted upon presently.*

2. Restriction is required under 35 U.S.C. 121 and 372.
This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

3. In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

I. Claims 9, drawn to a method for inducing in a cell a resistance to an anti-microtubule agent comprising the step of providing in a cell, a nucleic acid molecule that encodes a mutant γ actin, classified in Class 435, subclass 6.

II. Claims 9, drawn to a method for inducing in a cell a resistance to an anti-microtubule agent comprising the step of providing in a cell, a mutant γ actin, classified in Class 435, subclass 7.1.

III. Claim 10, drawn to a method for producing a cell that is resistant to an anti-microtubule agent comprising the step of providing in a cell, a nucleic acid molecule that encodes a mutant γ actin, classified in Class 435, subclass 69.1, 480.

IV. Claim 10, drawn to a method for producing a cell that is resistant to an anti-microtubule agent comprising the step of providing in a cell, a mutant γ actin, classified in Class 435, subclass 70.1.

V. Claim 11, drawn to a method for treating an individual for cancer with an anti-microtubule agent comprising the step of providing in a non cancerous cell of the individual, a nucleic acid molecule that encodes a mutant γ actin to induce in the non cancerous cell, a resistance to an anti-microtubule agent, classified in Class 424, subclass 93.2.

VI. Claim 11, drawn to a method for treating an individual for cancer with an anti-microtubule agent comprising the step of providing in a non cancerous cell, a mutant γ actin to induce in the non cancerous cell, a resistance to an anti-microtubule agent, classified in Class 424, subclass 93.21.

VII. Claim 12, drawn to a method for determining whether a compound is capable of treating a cell having a drug resistance phenotype comprising the steps of: providing in a cell a nucleic acid molecule that encodes a mutant γ actin, to induce in the cell, a resistance to an anti-microtubule agent; and contacting the cell with the compound to determine whether the compound is capable of treating the cell, classified in Class 435, subclass 6.

VIII. Claim 12, drawn to a method for determining whether a compound is capable of treating a cell having a drug resistance phenotype comprising the steps of: providing in a cell, a mutant γ actin, to induce in the cell, a resistance to an anti-microtubule agent; and contacting the cell with the compound to determine whether the compound is capable of treating the cell, classified in Class 435, subclass 7.1.

IX. Claim 13, drawn to a peptide for inducing in a cell a resistance to an anti-microtubule agent, classified in Class 530, subclass 322.

X. Claims 14-15, drawn to a nucleic acid molecule that encodes a peptide for inducing in a cell a resistance to an anti-microtubule agent, classified in Class 536, subclass 23.5.

4. The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The invention of Group IX was found to have no special technical feature that defined the contribution over the prior art of WO 00/13025 (see entire document).

The `025 publication teaches a fragment of a peptide of SEQ ID NO: 5, as claimed in claim 13(f). The `025 publication teaches the peptides ^{29}AVFPSIVGR^{37}, ^{29}AVFPSIVGRPR^{39}, ^{239}SYELPDGQVITIGNER^{254}, ^{96}VAPEEHPVLLTEAPLNPK^{113}, ^{292}DLYANTVLSGGTTMYPGIADR^{312}, ^{19}AGFAGDDAPR^{28} and ^{197}GYSFTTTAER^{206} of SEQ D NO:5 (see table 2, on page 30 in particular).

Since Applicant's inventions do not contribute a special technical feature when viewed over the prior art they do not have a single general inventive concept and so lack unity of invention.

Species Election

5. Irrespective of whichever group applicant may elect, applicant is further required under 35 US 121 (1) to elect a single disclosed species to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.

A. If Group IX is elected, applicant is required to a single specific sequence such as a) SEQ ID NO: 5, b) SEQ ID NO: 10, c) SEQ ID NO:6, d) SEQ ID NO:7, or e) SEQ ID NO: 8. These are distinct species because their structures and modes of action are different which, in turn, address different therapeutic endpoints.

B. If Group X is elected, applicant is required to a single specific sequence such as a) SEQ ID NO: 1, b) SEQ ID NO: 4, c) SEQ ID NO:2, d) SEQ ID NO:3, or e) SEQ ID NO: 4. These are distinct species because their structures and modes of action are different which, in turn, address different therapeutic endpoints.

6. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species,** including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be

obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

7. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

8. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad whose telephone number is (571) 272-0845. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 6, 2007

Maher Haddad

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Primary Examiner
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